

CLAIMS

1. A method for temporal inversion of a wave
corresponding to at least one initial signal $s(t)$,
5 where t is the time, this initial signal $s(t)$
exhibiting a certain central frequency f_0 and a
passband Δf , in which method a temporal inversion
signal $\alpha \cdot s(-t)$, where α is a multiplicative coefficient
and $s(-t)$ is the temporal inversion of $s(t)$, is
10 determined,

characterized in that it comprises at least the
following steps:

- a first transformation suitable for lowering the
central frequency of the signal and for substantially
15 not causing any loss of information with respect to the
initial signal is applied to the initial signal $s(t)$,
said first transformation producing a first set of
transformed signals comprising at least one first
transformed signal $K_i(t)$ of lower central frequency
20 than the initial signal, said first set of transformed
signals $K_i(t)$ being representative of said initial
signal $s(t)$,

- a second transformation producing a second
transformed signal $K'_i(t)$ substantially of the same
25 central frequency as the first transformed signal is
applied to each first transformed signal $K_i(t)$, said
second transformation thus producing a second set of
transformed signals $K'_i(t)$ from the first set of
transformed signals $K_i(t)$, said second transformation
30 being chosen so that said second set of transformed
signals is representative of the temporal inversion
signal $s(-t)$,

- a third transformation which generates the
temporal inversion signal $\alpha \cdot s(-t)$ is applied to the
35 second set of transformed signals $K'_i(t)$.

2. The method as claimed in claim 1, in which the
passband Δf is less than f_0 .